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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/621,250	07/16/2003	Dong Hwan Lee	CU-3300 RJS	1267	
26530	7590 09/12/2005	. EXAMINER		INER	
LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE			LUI, DO	NNA V	
<b>SUITE 1600</b>			ART UNIT	PAPER NUMBER	
CHICAGO, I	L 60604		2675		
			DATE MAIL ED: 00/12/2004	DATE MAIL FD: 09/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applic	ation No.	Applicant(s)					
		10/621	,250	LEE ET AL.					
Office Action Summary			ner	Art Unit					
			V. Lui	2675					
The MAI Period for Reply	LING DATE of this commun	nication appears on	the cover sheet	t with the correspondence a	address				
WHICHEVER IS  - Extensions of time I after SIX (6) MONT  - If NO period for rep  - Failure to reply with Any reply received	S LONGER, FROM THE N may be available under the provisions HS from the mailing date of this come	MAILING DATE OF s of 37 CFR 1.136(a). In no munication. tatutory period will apply an y will, by statute, cause the	THIS COMMU event, however, may d will expire SIX (6) Mapplication to become	y a reply be timely filed  MONTHS from the mailing date of this e ABANDONED (35 U.S.C. § 133).	,				
Status									
1) Responsi	ve to communication(s) file	ed on <i>07 July 2003</i>							
· <u> </u>	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.								
3) Since this	<u> </u>								
closed in	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Clai	ms								
4) Claim(s)	4)⊠ Claim(s) <u>1-20</u> is/are pending in the application.								
4a) Of the	4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s)	is/are allowed.								
6)☐ Claim(s) <sub>_</sub>	is/are rejected.								
	is/are objected to.								
8)⊠ Claim(s) <u>·</u>	1-20 are subject to restrict	ion and/or election	requirement.						
Application Paper	6								
9) The specif	ication is objected to by th	ne Examiner.							
10) The drawi	ng(s) filed on is/are	: a) accepted or	b) objected	to by the Examiner.					
Applicant r	nay not request that any obje	ection to the drawing(	s) be held in abe	eyance. See 37 CFR 1.85(a).	•				
Replaceme	ent drawing sheet(s) including	g the correction is rec	uired if the draw	ring(s) is objected to. See 37	CFR 1.121(d).				
11)☐ The oath o	or declaration is objected t	o by the Examiner.	Note the attac	hed Office Action or form F	PTO-152.				
Priority under 35 <b>U</b>	J.S.C. § 119			•					
	dgment is made of a claim ☑ Some * c)[☐ None of:	for foreign priority	under 35 U.S.C	C. § 119(a)-(d) or (f).					
1.⊠ Cei									
2.☐ Cei	_								
3.☐ Co <sub>l</sub>	3. Copies of the certified copies of the priority documents have been received in this National Stage								
	lication from the Internation	•							
* See the att	ached detailed Office action	on for a list of the co	ertified copies r	not received.					
Attachment(s)			_						
	ces Cited (PTO-892) rson's Patent Drawing Review (I	DTO 048\		ew Summary (PTO-413) No(s)/Mail Date					
	sure Statement(s) (PTO-1449 o			of Informal Patent Application (P	TO-152)				

## **DETAILED ACTION**

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-6 and 13-20, drawn to a liquid crystal driving device generating gate-on/off signals comprising: a sequence recognition means for generating a carry signal due to the pulse width of the vertical start signal inputted in synchronization with a vertical synchronous signal and a gate-off voltage generation means for outputting gate-off voltages through subtraction of voltage attenuation from the first gate-off voltage, classified in class 345, subclass 58.
- II. Claims 7-20, drawn to a liquid crystal driving device comprising: a liquid crystal panel, a plurality of signal line patterns to apply data signals, a look-up table for storing reference data corresponding to the number of gate driver ICs, a reference data generation section, a boosting section for boosting the signal level of the input data by adding the selected reference data to the input data, a count section, and a control section for calculating parameter values on the basis of the number of gate drivers and gate lines for comparison with the count value in order to control the reference data generation selection to select and output reference data corresponding to the look-up table according to the result of comparison of the count value to a parameter value, classified in class 345, subclass 95.

The inventions are distinct, each from the other because of the following reasons:

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- 1. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as generating the same gate-off voltage at every gate driver IC for obtaining improved uniformity of image quality by removing brightness variation due to block shape, which is caused by gate-off voltage differences among the gate driver ICs; invention II has separate utility such as for improving screen quality by preventing a gate block phenomenon, variation of uniformity, flicker, and degradation of response speed which are caused by charge voltage differences and charging time delay. See MPEP § 806.05(d).
- 2. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna V. Lui whose telephone number is (571) 272-4920. The examiner can normally be reached on Monday through Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donna V Lui Examiner Art Unit 2675 Page 4

KENT CHANG PRIMARY EXAMINER